

**Notice of Allowability**

Application No.

09/641,553

Examiner

Bharat N. Barot

Applicant(s)

WANG ET AL.

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed with the amendment on 07/28/2006.
2. ☒ The allowed claim(s) is/are 7-8, 18, 20-21, and 23-31 re-numbered as 1-14.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 08/28/2006.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Bharat Barot*  
**BHARAT BAROT**  
**PRIMARY EXAMINER**

(571) 272-3979

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with L. Alan Collins (Reg. No. 57,646) on August 28, 2006.

3. The application has been amended as follows:

IN THE CLAIMS: Claims 7, 18, 20, 23, and 24 have been amended; and claims 10 and 22 have been canceled.

**1-6.(Canceled)**

**7.(Currently Amended)** In a distributed system including a plurality of redundant components, a method for ~~performance~~ leader election by a first redundant component, comprising:

multicasting age information, wherein the age information includes a duration of time on-line, particular to the first redundant component to all other components in the plurality of redundant components, the age information relating to one or more criteria according to which a currently-active leader component is to be determined;

Art Unit: 2155

receiving age information from each other component in the plurality of redundant components particular to each component and relating to the one or more criteria according to which the currently-active leader component is to be determined; and

determining whether the first redundant component is the currently-active leader component by comparing the age information particular to the first redundant component with the age information received from each of the redundant components,

wherein if the first redundant component determines that it is not the currently-active leader component, the first component knows one of the components in the plurality of redundant components is the currently-active leader component.

**8.(Previously Presented)** The method of claim 7, further comprising periodically repeating the method.

**9-17.(Canceled)**

**18.(Currently Amended)** The method of claim 40 7, wherein the determining whether the first component is the currently-active leader component comprises determining whether the first component is an oldest component.

**19.(Canceled)**

**20.(Currently Amended)** In a computer system including a plurality of redundant components, a method for electing a currently-active leader component, comprising:

multicasting currently-active leader election criteria information among all the plurality of redundant components; and

at each component in the plurality of redundant components:

a) determining whether the component is the currently-active leader component, based on a currently-active leader election criteria information received from all the other components in the plurality of redundant components, wherein the currently-active leader election criteria information includes age information, wherein the age information includes a duration of time on-line; and

b) repeating the determining whenever the component detects an occurrence of a failure that has a potential to affect the currently-active leader component.

**21.(Previously Presented)** The method of claim 20, further comprising: periodically repeating the method.

**22.(Canceled)**

**23.(Currently Amended)** The method of claim 22 20, wherein the determining whether the component is the currently-active leader component comprises:

determining whether the component is an oldest component; and

if the component determines that it is the oldest component, concluding that the component is the currently-active leader component.

**24.(Currently Amended)** The method of claim 22 20, wherein the multicasting age information includes multicasting information regarding how long each component in the plurality of redundant components has been online.

**25.(Previously Presented)** The method of claim 20, wherein the redundant components are redundant instances of a daemon.

**26.(Previously Presented)** The method of claim 25, wherein the daemon is a system management daemon.

**27.(Previously Presented)** The method of claim 25, wherein the daemon is a power line monitoring daemon.

**28.(Previously Presented)** The method of claim 20, wherein the redundant components are redundant executing processes.

**29.(Previously Presented)** The method of claim 20, wherein the redundant components are redundant class objects.

Art Unit: 2155

**30.(Previously Presented)** The method of claim 20, wherein the redundant components are redundant devices in an automation system.

**31.(Previously Presented)** The method of claim 20, wherein the redundant components are redundant nodes in a network.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Examiner's Amendment and/or Statement of Reasons for Allowance."

#### **CONTACT INFORMATION**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bharat Barot** whose Telephone Number is **(571) 272-3979**. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number **(571) 273-8300**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Saleh Najjar**, can be reached at **(571) 272-4006**.

Patent Examiner Bharat Barot

Art Unit 2155

August 29, 2006

*Bharat Barot*  
**BHARAT BAROT**  
**PRIMARY EXAMINER**